

Petroleum Engineering Technical Overview Training

An overview of day-to-day Petroleum Engineering Applications



Why: Over the past decade, the Petroleum Industry has experienced increasing demands for technically qualified personnel. At the same time the most experienced petroleum engineering and technical personnel are retiring and leaving the industry. The resulting open positions are being filled from outside the Oil & Gas Industry and by students coming directly out of school.

Need: The need exists for a general overview training course that meets the needs of oil & gas operating and service companies alike. This course will provide your company personnel with an understanding of needed day-to-day technical applications you require to meet your minimum upstream petroleum technical qualification training, with a focus on Reservoir Engineering, Field Production Engineering, and Oilfield Economics.

This course addresses this need using the Petroleum Engineering Toolbox in applying industry standard engineering procedures and calculations to typical oilfield problems. Students are encouraged to bring their own laptops, and to run practical problems using the Petroleum Engineering Toolbox during the two-day session. Day-to-day problems in Reservoir, Production and Operations Engineering, and Oilfield Economics, are covered.

The course is designed for:

- New hires with little to no petroleum industry experience
- Engineers, technicians, and service professionals involved with production, operations, and economic analysis of oil & gas production.

Where: Technical Toolboxes, Inc. offices located at 3801 Kirby Drive, Suite 520, Houston, TX 77098. Inside Loop 610 close to the intersection of I-59 and Kirby (map to be provided).

When: Two (2) days

Time: 8 a.m. to 5 p.m.

Price: \$895 per person

Course Basis: This training course uses the Petroleum Toolbox software product as the basis or foundation to provide instruction on each of the training modules. Students will be provided a free copy of the Petroleum Toolbox during and for use after the training course to aid in the instruction.

Instructor: Dr. David Shaw has over 20 years of technical experience in the application of advanced modeling and IT concepts to the energy industry worldwide. Following academic appointments both in mathematical and engineering disciplines, he has held a wide variety of research, development, consulting assignments, both in the upstream and pipeline & facilities modeling; and real-time automation sectors. Recent experience involves senior consulting assignments at major international pipelines; and automation and control suppliers.

Dr. Shaw is a past Chairman of Professional Education at the Society of Petroleum Engineers, a past Royal Society Lecturer, and is an external examiner in Mathematics and Computer Science at Rice University

Terms and conditions: One registration is required per person. Upon receipt of your above registration an invoice will be generated for payment. Payment is due 30 days from receipt. ½ of the course fee will be refunded provided written cancellation is received within 48 hours of the course start.



COURSE CONTENT

RESERVOIR

- Log Calculations for water saturations, salinity, porosity and resistivity.
- Pressure Build-ups and related reservoir calculations
- Gas, Fluid, and Formation Properties
- Volumetric and Material Balance Calculations
- Production Calculations
- Four Point Calculations
- Darcy Flow Calculations
- Inflow Calculations
- Bottom hole and Pressure Drop Calculations
- Waterflood Calculations
- Quick Economics
- Other Misc. Reservoir Calculations

PRODUCTION

- Gas Lift Design
- Rod Pumping Design
- Other Artificial Lift Programs
- Electrical Submersible Pump Design
- Gas Flow Calculations
- Inflow Calculations - Oil Wells
- Tubing Design
- Oil Well Flow Calculations
- Miscellaneous Production Programs

OPERATIONS

- Calculate rheology parameters and friction pressure losses
- Determine the required salt water solutions for completion or work over fluids.
- Darcy flow equation for a horizontal well.
- Effective wellbore radius and skin factor calculation for a horizontal well.
- Calculates fluid displacement and pressure losses when pumping mud or cement.
- Calculates inflow performance of oil/gas wells
- Vertical flow correlation for gas wells.
- Steady-state productivity of a horizontal oil well
- Vertical three-phase flow correlation for oil wells.
- Calculates flow rate, water holdup, slip velocity, water rate and oil rate from production logging survey.
- Calculates and plots oil well choke performance.

ECONOMICS

- Economic models for oil and gas properties
- Oil well life calculations
- Economic limit calculations
- Present worth profiles
- RORs, payouts, and print annual cash flow reports

**Please complete the attached form
and fax to TTI at 713-630-0560**

Course Cost: \$895/per student

Course Date: April 16-17, 2009

Name _____

Company _____

Address _____

Address _____

City, State, ZIP _____

Country _____

Phone/Mobile _____

Fax _____

E-mail _____

Payment by Credit Card

Circle One: VISA MasterCard AMEX

CC Number _____

Expiration Date _____

Signature* _____

** By signing above I commit to paying the course fee when invoiced*



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